

THE POINT BREEZE PLANT OF THE WESTERN ELECTRIC COMPANY

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EDWIN M. GUE

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## SUMMARY

The establishment of the Point Breeze Works of the Western Electric Company in Baltimore, Md. is a typical example of the many companies, which have chosen that city as the site to build factories. Such activity has increased the industrial prestige of Baltimore.

About one year ago the Western Electric Company with two manufacturing plants, realized the need of a new factory.

The location of this plant at Point Breeze was the result of a long and thorough investigation with certain requirements in mind.

Due to the necessity of beginning manufacturing at once Western Electric rented the Colgate Warehouses and planned to lay out a small plant there.

At the new plant there is to be a cable building, an insulated wire factory, a power house, a scale house and office buildings. In addition roads, streets, and parks are to be laid out.

A bulkhead is also being constructed in the Patapsco river and Colgate creek, to provide docking facilities and to reclaim land.

Beginning only a few days after January 1, 1929 development at the Colgate Warehouses was very rapid. Many sections were taken over, and a complete manufacturing unit

was built up.

The same rapid development featured the work at the new factory. Excavations began on January 28, 1929 and now the cable building is nearly completed, while the others are in various stages of completion.

When the plant is finished there will be three production branches, and the estimated capacity will be 30,000 employees.

At present manufacturing is being carried on at the Colgate Warehouses and some cable is being made at the Point.



W. H. Meese, Works Manager at Point Breeze

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### INTRODUCTION

At the present time in the City of Baltimore, within vision of the famous Fort McHenry, the birthplace of the "Star Spangled Banner," there is being constructed one of the greatest manufacturing plants in the state of Maryland. This refers to the new Atlantic seaboard plant of the Western Electric Company, namely the Point Breeze Works. This gigantic industrial enterprise is a typical example of the many companies, which, during the past few years, have chosen Baltimore, Maryland as the site to build plants, in preference to the other industrial cities along the Atlantic Coast. Notable among these companies are the Curtiss-Caproni Aircraft Corporation, Proctor and Gamble Co., Standard Sanitary Manufacturing Company, and the Western Electric Company--all of these attracted to Baltimore by the city's ideal location and the cooperative assistance of its officials.

All of these manufacturing units have increased the industrial prestige of Baltimore and of the State of Maryland. Hence they are all of importance, but perhaps the paramount one in public interest today is the Point Breeze Works of the Western Electric Company. This interest is <sup>due</sup> probably ~~to~~ to the size of the project; to the fact that it is under construction at the present time, and to the fact

that this enterprise when completed, will rank Baltimore as the nation's third telephone manufacturing city. Hence this project is worthy of note to all Marylanders, so in the following pages I will give some information regarding the history, location, design, and other points of interest concerning the Point Breeze Plant.

#### HISTORY AND REASONS FOR BUILDING A NEW FACTORY

The history of the Point Breeze Works has its source well back in the annals of the Western Electric Company.

The Western Electric Company is the manufacturing, purchasing, distributing, and supply subsidiary of the American Telephone and Telegraph Company. About one year ago this corporation had two branches, one, the Hawthorne Works at Chicago, Ill. and the other the eastern factory at Kearny, New Jersey. These two plants were employing about 60,000 people, yet it was evident that even if they be expanded to their greatest possible dimensions, they would not be able to supply the future demands, especially for long distance communication apparatus.

In the last five years there has been a tremendous building program in the United States. Many office buildings have been constructed and there has been an increased demand for handsets, desksets, cable terminals and other telephone apparatus. Also the business man has learned to make use of the great utility of the long distance telephone, instead of leaving his business and making a journey

to carry on some deal or proposition he makes use of long distance telephony and saves both time and money. This increased use has caused a greater demand for such lines and hence for long distance telephone cable. So in order to meet this increased demand a new plant had to be constructed, the purpose of which is explained by Edgar S. Bloom, president of the Western Electric Company, in the following statement. He says, "The Baltimore Plant is required primarily for the manufacture of telephone cable to meet the increasing demands of the American public for long distance telephone service. The improvements in transmission and in the manufacture of long distance telephone cable have revolutionized long distance telephony. While these improvements have made possible the things to which I have just referred, I believe long distance telephony is still in its infancy."

#### LOCATION OF POINT BREEZE AND REASONS FOR CHOOSING SITE

In searching for a site for the new plant the company's engineers had several matters in mind. First, they desired a site along the Atlantic seaboard in order to be near the New York and New Jersey Telephone Companies, the greatest users of toll cable. The company also desired from 100 to 150 acres of land, well located as to transportation facilities, both water and rail; proximity to an adequate labor supply for a plant that would have an ultimate capacity of 30,000 employees; reasonable tax rates; sufficient power at fair rates and governing officials with a favorable attitude toward industry.

The company's officials first visited the principle railroads serving the Atlantic seaboard and found most of them ready to give assistance. Next they went to all the possible cities and each one was given a thorough investigation. Finally the prospects were thinned down to three cities, Wilmington, Philadelphia, and Baltimore. Of these three cities Baltimore was chosen as the most desirable one due to its excellence of location, and to the whole-hearted cooperation of its business men. In winning this new industry for the city the Industrial Bureau, and organization whose purpose is to encourage new business in Baltimore and to render them all possible aid in becoming established, was very active in aiding the Western Electric Company to determine the most advantageous site.

With the aid of the above mentioned Bureau and its director H. Findlay French, the company decided upon Point Breeze, a section of land located in the Canton district of Baltimore on the Northern side of the Patapsco river. It was only after considerable deliberations that this site was chosen, as it was necessary to consolidate two pieces of property owned by different interests. Furthermore a railroad passed directly through the property where it would be necessary to construct buildings. Also the land on deep water could not be made of sufficient area to handle shipping unless the U. S. Government would grant the Company permission to construct bulkheads in the Patapsco river and in Colgate Creek. Finally all of these difficulties were arranged by the un-

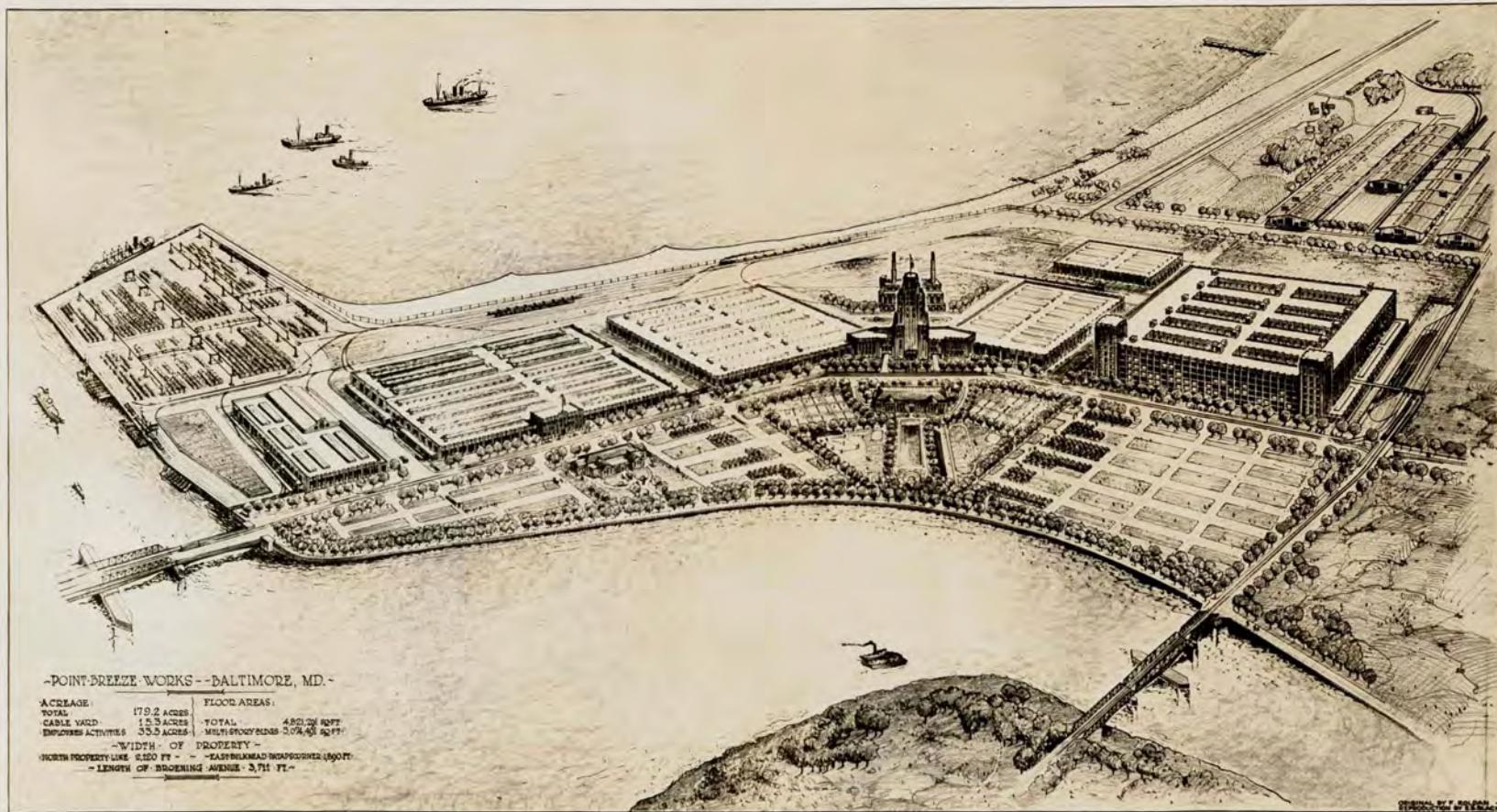
selfish cooperation of the citizens and officials, and as a result Western Electric purchased the property from the railroad company and the Canton company.

It is an interesting fact to note that River View Park occupied part of this land for many years and before construction for the Point Breeze Works could begin, roller coasters, merry-go-rounds, and all sorts of amusement devices had to be removed.

#### DESIGN OF WORKS AT COLGATE WAREHOUSES

In studying the design of the Point Breeze Works, there are two different plants to be considered, that is, the temporary quarters in the Colgate Warehouses must be explained as well as the work at the Point.

The Western Electric Company, desiring to begin operations at once and knowing that some little time would elapse before manufacturing could begin at the Point, rented from the Canton Company a group of one story buildings known as the Colgate Warehouses. These warehouses are located only a short distance from the proposed plant and are now being used as the manufacturing and storing unit of the Point Breeze Works. There are four rows of these barracks, separated by concrete drives. On the outer sides of buildings 1 and 2 there is a freight landing, which extends the entire length of the structures. The warehouses are numbered in the following manner: along the ends they are labelled 1, 2, 3, and 4 and each separate warehouse is divided into sections designated by the letters A, B, C,..... Thus it is possible to refer



Architect's drawing of final plant

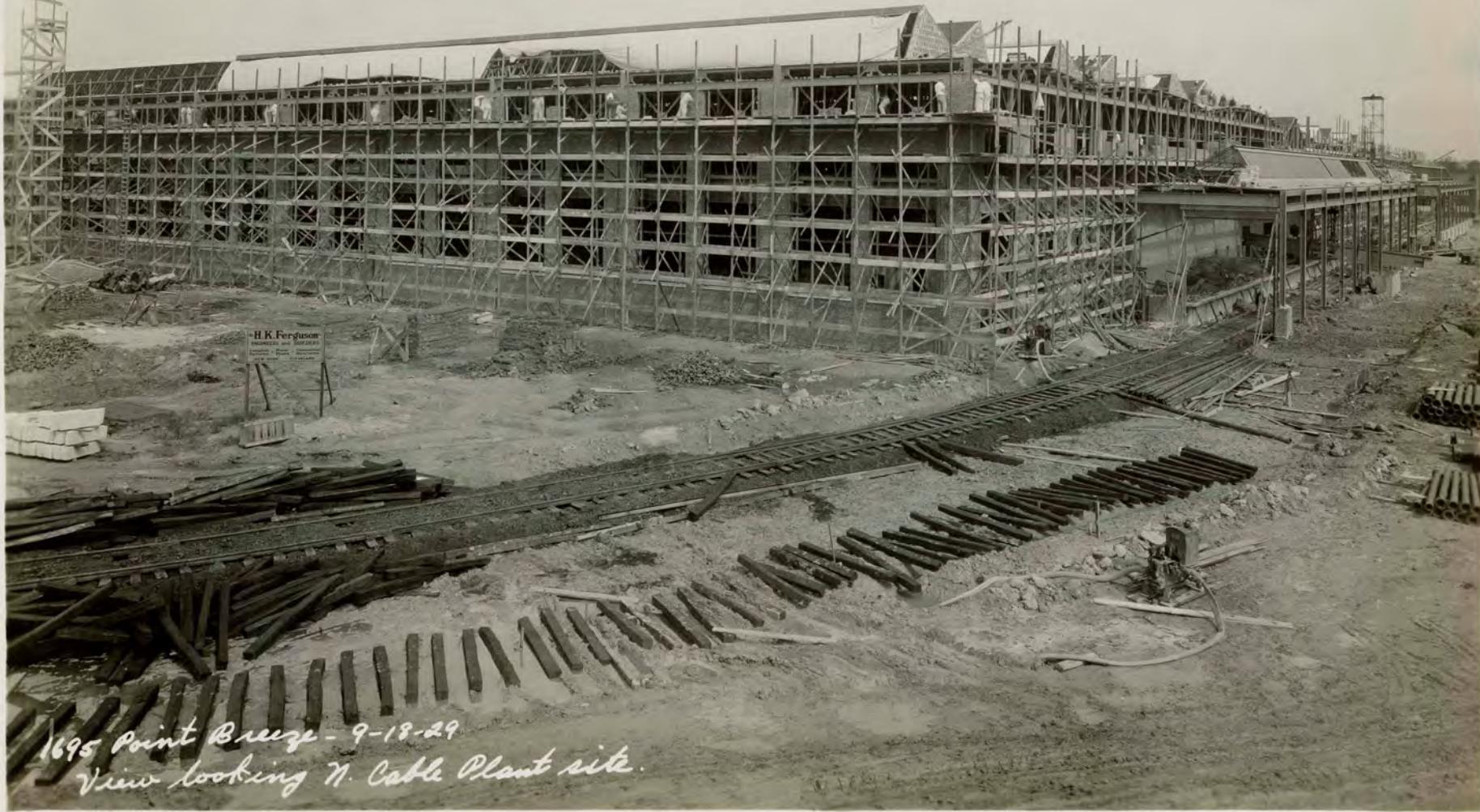
directly to one particular section of the group, as A-2, this of course, signifies the first section in Warehouse No. 2, and as the above method is applied to all divisions it greatly enhances the ease of directing or referring to any definite section of the plant.

As stated above the Warehouses are a complete manufacturing unit and are laid out in such a manner as to provide departments for all branches of the work. The engineer who was charged with the task of laying out, remodelling, and installing machinery in the barren warehouses was Charles M. Davidson of the Factory Planning Division of the Western Electric Company. A thorough discussion of this installation and development will be given in a later paragraph.

#### DESIGN OF NEW PLANT

Now the most important part of the design must be considered, that is, the part at the Point itself. The accompanying drawing will perhaps be more explanatory than the following discourse, however a few facts may help to explain some of the details.

The main parts of the Point Breeze Works are the cable plant; the insulated wire plant; the building of a bulkhead to reclaim land and to provide a suitable dock for deep water vessels; the yard railroad scale house; the power house, and the railroad tracks. In addition there will eventually be constructed store houses; concrete roads and streets; lighting systems for all roads, and complete park and playground facilities for the use of the employees.



1695 Point Breeze - 9-18-29  
View looking N. Cable Plant site.

The first unit of the cable plant is the largest of the buildings now under construction. Its dimensions are 500 feet wide by 600 feet long, and it has a total floor area of 7.5 acres. At the North West corner of the structure there is a three-story office building. The superstructure has a framework of structural steel which has a total weight of about 4,500 tons. This enormous framework is supported by 5,500 cubic yards of concrete which rests on 2,800 piles. The outside walls are made of brick while the roof, or the open sections of the roof, is covered with a special glass which permits the passage of the ultra-violet rays of light into the building. Another feature of the building is that it is so constructed that additional units may be built to it at any time. In this tremendous plant there is to be installed and in fact is being installed all the necessary apparatus for the manufacture of lead and tape armoured cable. This includes insulators, cotton binders, twistlers, standing machines, lead presses and the new 35 ton tape armoring machines.

The second largest building is the insulated wire building. It is to cover 6.4 acres and to be similar and adjacent to the cable manufacturing unit. Also it is only one unit of the probable plant of the future. The only real difference in design and construction from the cable building is that the nature of the soil under this structure makes the driving of piles unnecessary, but there are about 2,000 cubic yards of concrete foundation which support the steel superstructure.



CUSTON-WRIGHT FLYING SERVICE

No Insulated Wire Building

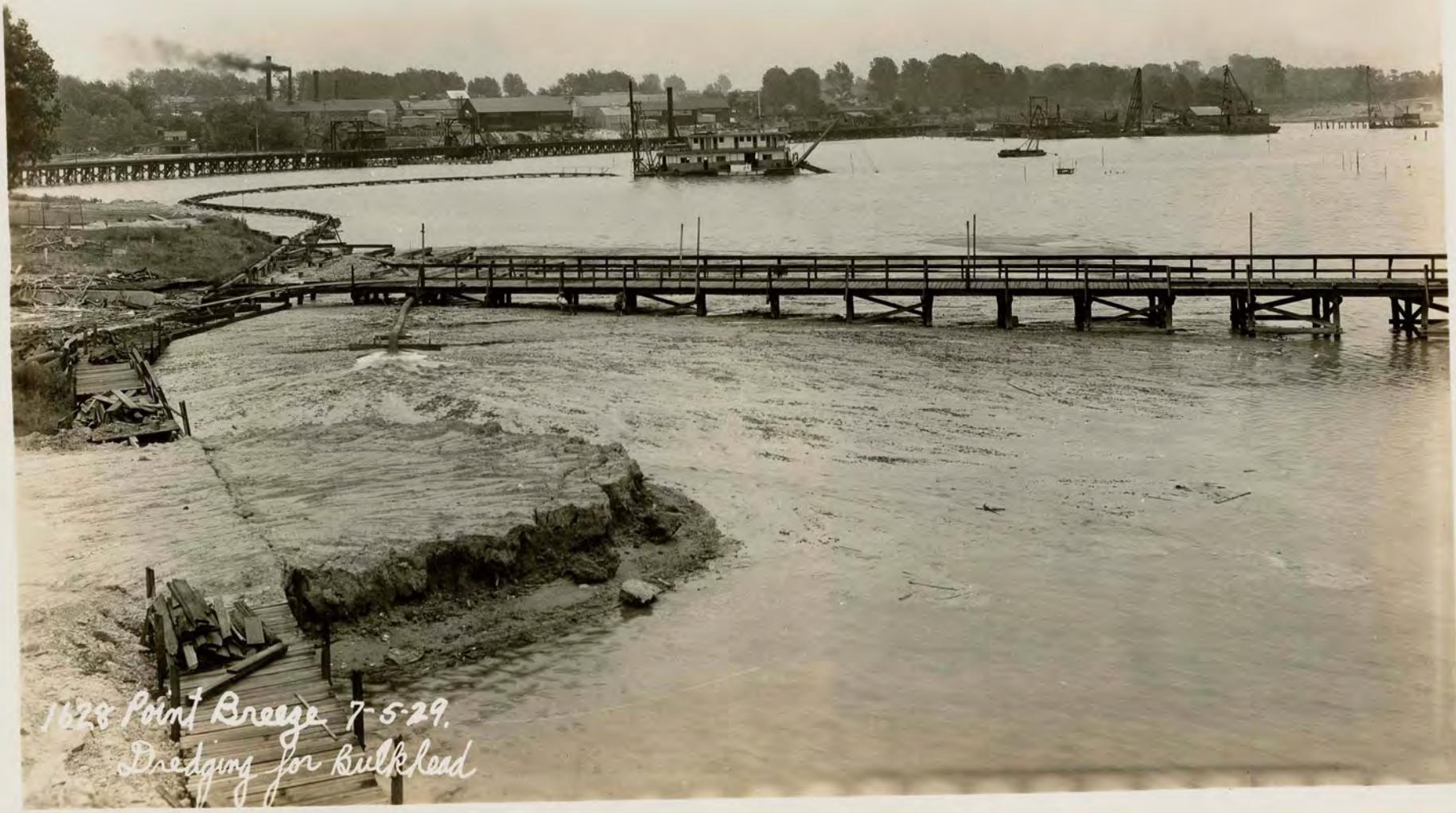
The other main buildings being erected at present are the boiler house portion of the power unit, which when completed will arise to a height approximately equal to that of a thirteen-story building, and the railroad scale house.

In addition to these projects there is also another major operation on the Point. This is the bulkhead, which is being constructed to provide a satisfactory dock for sea going freighters. This bulkhead will be a concrete wall, which rises seven feet from mean low tide and will have a total length of 7,100 feet. There will also be a substantial "rip-rap" deposited to act as a sustaining wall for the fill-back of the bulkhead. This wall will be constructed in the waters of the Patapsco river and the Colgate Creek, and will serve as the new shore line of the Point. As this line will be extended from the old position, a number of acres now under water will be reclaimed.

The above mentioned structures, along with several underpasses, are the main features of the Point Breeze Works at present, but from the accompanying drawing it is seen that



Views of property lines and bulkheads



1628 Point Breeze 7-5-29.  
Dredging for Bulkhead

many more manufacturing units, and beautifying projects are contemplated in the future. The man in charge of the design and construction of the plant is Herbert G. Dean, Construction Engineer, and a representative of O. C. Spurling, the company's Engineer of Plant.

#### DEVELOPMENT AT COLGATE WAREHOUSES

A few days after January 1, 1929, when it was finally settled as to the location of the new factory, negotiations were carried on by the Western Electric Company with the Canton Company for the renting of a portion of the Colgate Warehouses. So about the third week in January, 1929 the Company took over Sections F and G in Warehouse No. 1, and the installation of flame-proof wire equipment was promptly started. A hospital and offices were also installed in Building G-1 as well as facilities for shipping and receiving.

However the demand for more space grew, and in April 1929, Building E-1 was rented. This section with a floor area of 22,400 square feet was used to install more wire equipment, and to provide a restaurant for the ever-increasing number of employees.

During the same month the Company also rented sections F-2 and G-2, with a combined area of 41,600 square feet. In Building F-2 machine shop equipment was installed, and today it is one of the finest shops of its nature in the country. In Section G-2 a tool room was laid out. Toward the end of May, the Buildings E-2 and H-1 were also taken over. Section H-1 with an area of 19,200 square feet was to be used for the



UNDERWOOD & UNDERWOOD  
WASHINGTON

H. G. Dean, Construction Engineer

manufacture of cable terminals, while E-2 was assigned to lead covered cable apparatus which included winders, doublers, and twisters but not the lead presses. The manufacture of fuses was also started in this section.

On August 10, 1929, 5,400 square feet in Section A-3 were rented to be utilized as a storehouse for machinery, and a clearing house for equipment destined for the Point. During this whole period the office force had grown steadily and rooms for them had been found in different parts of the manufacturing sections, however, it was decided that they should be more centralized in a better location. At the same time it became necessary to have more space for merchandise, so in order to remove these two conditions Building A and C were taken over on October 29, 1929. Of these two sections, A was assigned to the merchandise department and C was utilized as the new location of the entire office group.

The size of the plant on November 15, 1929 was as follows: Total gross area in the Warehouses 194,200 square feet, made up of 83,200 square feet in No. 1; 105,600 square feet in No. 2, and 5,400 square feet in Warehouse No. 3. In fact the size of the plant had continuously increased, and by this time the barren warehouses of January, 1929 had been transformed into a small manufacturing unit.

#### DEVELOPMENT AT NEW PLANT

In studying the development at Point Breeze perhaps the most astonishing thing is the swiftness of its growth. In an article by Miss Alice R. Jimmeyer, an employee of the Western Electric, this characteristic is aptly put. She writes

"The most amazing thing about Point Breeze is the swiftness of its growth; beside it, Jack's famous bean stalk is a century plant".

On August 1, 1928 a group of Western Electric officials made their first trip to Baltimore. After having found a desirable site as described before, the contract for all engineering and construction work was awarded to the H. K. Ferguson Company on November 10, 1928. This company sub-awarded the contract for all excavations and grading to Potts and Callahan, on January 28, 1929.

The excavations were first begun on January 19, 1929 when work on the cable plant foundation was started. By April 1, 1929 the first pile of the 2,800 which support the structure had been driven, and by September 6, the last pound of structural steel had been rivited in place. At the present time this first unit of the cable plant is nearly completed and in fact some manufacturing is being carried on.

On April 30, 1929 the United States Government granted the Western Electric Company a permit to dredge channels in Colgate Creek and to construct bulkheads, so as to reclaim land. Work on this structure progressed rapidly, with pile drivers and dredges working day and night, and by September 16, 1929 there had been 5,500 piles driven, 13,200 cubic yards of preliminary dredging removed, and 252,000 board feet of lumber used for pile caps, decking and the like. At the present time the portion of the bulkhead in the Patapsco



1621 Point Breeze 6-1324  
First Cable terminal to be assembled

river is completed except for the building of a mud fence, and the portion on Colgate Creek is expected to be finished about February 1, 1930.

Excavations for the Insulated Wire Building began on July 12, 1929 and by the middle of September the steel framework was partly erected, and at present the plant is about 50 percent complete.

The other main structures, that is the boiler house and the scale house, were started in August and September respectively. Work on these building progressed rapidly and now the scale house is about 80 percent completed, while the boiler house lacks about 70 percent of being finished.

In addition to the projects described above, there have been roads built, street car lines re-routed, and railroad tracks run into the property. Much of this work is now being done and more is contemplated for the future.

#### PRODUCTS TO BE MANUFACTURED

When this industrial enterprise is completed there will be three production branches. The main one will be for lead and tape armoured cable, and the others will be for flame proof wire and for sub-station apparatus. Including in this sub-station equipment will be sub-sets, condensers, induction coils, and other telephone parts.

#### PRODUCTION AT PRESENT

At present in temporary quarters in the Colgate

Warehouses, the Western Electric is employing about 1300—1400 persons in the manufacture of the three classes of products mentioned in the last paragraph. However in the manufacture of cable there are no devices for applying the lead covering on the steel tape used for armour. At the new plant over on the Point, there is being some cable manufactured. However they are not operating extensively as yet. In regards to the amount of production it can be said that each day sees an increased personnel and an increased output. Predictions have been made that eventually the plant will provide employment for approximately 30,000 people, and that the cable unit, alone, in full operation will produce weekly cables containing 170,000,000 feet of wire.

#### CONCLUSION

The construction of this great new factory marks another step in the industrial development of Baltimore and of the State of Maryland. It is another case where the parks and open places of the city have given away before the relentless march of industry.

No more do Baltimoreans go to River View Park to enjoy the ocean breezes and the thrills of the pleasure devices, instead they go to Point Breeze as employees of or visitors to the great new plant of the Western Electric Company. No longer do the roller coasters clatter and rumble along their tracks, and no more do the merry-go-rounds send out their plaintive tunes. All of this is gone. In its

place there is the hum of braiders, the whine of twisters, and the clatter and buzz of industry. In fact when one looks at the tremendous buildings which have been erected, it is hard to realize that only one year ago this land was partly covered with a great amusement park. However this marvelous development is merely an example of the great engineering skill of today.

The material for this paper was obtained from the following publications, and partly from interviews with Mr. R. E. Vining, Publicity Director at Point Breeze; Mr. G.E. Booth, Merchandise Manager; Mr. L. E. Davids, Office Manager, and Mr. E. H. Leedom, an employee in the Merchandise Department.

The publications are as follows:

The Baltimore Sun .

The Western Electric News.

The Pointer(a publication at Point Breeze).

"How A City Won An Industry" by P. L. Thomson,  
Director of Public Relations, Western Electric  
Company.